This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A dynamic handwriting recognition system for a pervasive device comprising:

a touch screen device;

a non-electronic, passive stylus means having no light source, enabling a user to write on said touch screen, said touch screen generating dynamic information associated with stylus writing;

a digital image capture means mounted in said pervasive device for obtaining images of said non-electronic stylus as said user writes on said touch screen, said digital image capture means obtaining images located along a plane that is perpendicular to the plane of touch screen surface;

means for processing said obtaining images and extracting non screen-related information associated with non-electronic, passive stylus manipulation by said user, wherein said extracted non screen-related information include tilt parameters associated with said non-electronic, passive stylus manipulation, said tilt parameters including a tilt angle determined by only two points in three-dimensional space; and

handwriting recognition means receiving both said dynamic touch screen information and extracted non touch screen-related information from said processed images for recognizing writing of said user, wherein improved handwriting recognition is achieved.

2. (Canceled)

3. (Original) The dynamic handwriting recognition system as claimed in Claim 1, wherein said pervasive device comprises a Personal Digital Assistant (PDA) device.

4. (Previously Presented) The dynamic handwriting recognition system as claimed in Claim 1, further including a touch screen control device for generating coordinates of said non-electronic, passive stylus writing upon said touch screen.

5. (Previously Presented) The dynamic handwriting recognition system as claimed in Claim 1, wherein said digital image capture means obtains images in a plane perpendicular to a plane defined by said touch screen device.

6. (Original) The dynamic handwriting recognition system as claimed in Claim 4, wherein said pervasive device implements pattern recognition means for extracting said non touch screen-related pen information.

7. (Previously Presented) The dynamic handwriting recognition system as claimed in Claim 6, wherein said non-electronic, passive stylus means includes elements enabling recognition by said pattern recognition means.

8. (Original) The dynamic handwriting recognition system as claimed in Claim 7, wherein said elements enabling pattern recognition includes colored segments in a structure known to said pattern recognition means.

9. (Currently Amended) A method for dynamically performing handwriting recognition in a pervasive device including a touch screen device and a non-electronic, passive stylus means having no light source enabling a user to write on said touch screen device, said method comprising the steps of:

a) generating dynamic information associated with non-electronic, passive stylus writing;

b) implementing ~~mounting~~ a digital image capture means mounted in said pervasive device ~~that is adapted~~ to obtain images of said non-electronic stylus as a user writes on said touch screen, said digital image capture means obtaining images located along a plane that is perpendicular to the plane of touch screen surface;

c) processing said obtaining images and extracting non screen-related information associated with non-electronic stylus manipulation by said user, wherein said extracted non screen-related information include tilt parameters associated with non-electronic, passive stylus manipulation, said tilt parameters including a tilt angle determined by only two points in three-dimensional space; and

d) recognizing writing of said user utilizing both said dynamic touch screen information and extracted non touch screen-related information from said processed images, wherein improved handwriting recognition is achieved.

10. (Canceled)

11. (Original) The method for dynamically performing handwriting recognition as claimed in Claim 9, wherein said pervasive device comprises a Personal Digital Assistant (PDA) device.

12. (Previously Presented) The method for dynamically performing handwriting recognition as claimed in Claim 9, wherein step a) of generating dynamic information includes the step of generating coordinates of said non-electronic, passive stylus writing upon said touch screen.

13. (Previously Presented) The method for dynamically performing handwriting recognition as claimed in Claim 9, wherein said digital image capture means is mounted to obtain images in a plane perpendicular to a plane defined by said touch screen device.

14. (Previously Presented) The method for dynamically performing handwriting recognition as claimed in Claim 12, wherein said processing step c) includes implementing pattern

recognition means for extracting said non touch screen-related non-electronic, passive stylus information.

15. (Previously Presented) The method for dynamically performing handwriting recognition as claimed in Claim 14, further including the step of facilitating non-electronic stylus, passive recognition by a pattern recognition device.

16. (Previously Presented) The method for dynamically performing handwriting recognition as claimed in Claim 15, wherein said non-electronic, passive stylus recognition is facilitated by including colored segments in said stylus that is known to said pattern recognition device.

17. (Currently Amended) A pervasive device comprising:

a touch screen device having a handwriting surface;

a non-electronic, passive stylus means having no light source enabling a user to write on said touch screen surface, said touch screen device generating dynamic information associated with non-electronic, passive stylus writing;

a digital image capture means mounted in said pervasive device for obtaining images of said non-electronic, passive stylus as said user writes on said handwriting surface, said digital image capture means obtaining images located along a plane that is perpendicular to the plane of touch screen surface;

a means for processing said obtaining images and extracting non screen-related information associated with non-electronic, passive stylus manipulation by said user, wherein said extracted non screen-related information include tilt parameters associated with non-electronic, passive stylus manipulation, said tilt parameters including a tilt angle determined by only two points in three-dimensional space; and

a handwriting recognition means receiving both said dynamic touch screen information and extracted non touch screen-related information from said processed images for recognizing writing of said user, wherein improved handwriting recognition for said device is achieved.

18. (Canceled)

19. (Previously Presented) The pervasive device as claimed in Claim 17, further including a touch screen control device for generating coordinates of said non-electronic, passive stylus writing upon said touch screen.

20. (Previously Presented) The pervasive device as claimed in Claim 17, wherein said digital image capture means obtains images in a plane perpendicular to a plane defined by said touch screen device.

21. (Previously Presented) The pervasive device as claimed in Claim 20, wherein said pervasive device implements pattern recognition means for extracting said non touch screen-related non-electronic, passive stylus information.

22. (Previously Presented) The pervasive device as claimed in Claim 21, wherein said non-electronic, passive stylus means includes elements enabling recognition by said pattern recognition means.

23. (Original) The pervasive device as claimed in Claim 22, wherein said elements enabling pattern recognition includes colored segments in a structure known to said pattern recognition means.